

REMARKS

Claims 1 through 12 are pending in this Application. Claims 1 and 9 have been amended. Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclosure as, for example, page 8 of the written description of the specification, line 19, through page 9, line 7, noting that the amendment to claim 9 merely defines WC consistent with conventional nomenclature. Applicants submit that the present Amendment does not generate any new matter issue.

Claim 9 was rejected under the second paragraph of 35 U.S.C. § 112.

In the statement of the rejection, the examiner asserted that the recitation “WC-based” renders the claimed invention indefinite. This rejection is traversed.

Indefiniteness under the second paragraph of 35 U.S.C. § 112 is a **question of law**. *Personalized Media Communications LLC v. U.S. International Trade Commission*, 161 F.3d 696 (Fed. Cir. 1998); *Tillotson, Ltd v. Wlaboro Corp.*, 831 F.2d 1033 (Fed. Cir. 1987); *Orthokinetics Inc. v. Safety Travel Chairs Inc.*, 806 F.2d 1565 (Fed. Cir. 1986). Accordingly, in rejecting a claim under the second paragraph of 35 U.S.C. § 112, the Examiner must provide a basis in fact and/or cogent technical reasoning to support the ultimate legal conclusion that one having ordinary skill in the art, with the supporting specification in hand, would not be able to reasonably ascertain the scope of protection defined by a claim. *In re Okuzawa*, 537 F.2d 545 (C.C.P.A. 1976). Significantly, consistent judicial precedents holds that **reasonable precision** in light of the particular subject matter involved is all that is required by the second paragraph of 35 U.S.C. § 112. *Zoltek Corp. v. United States*, 48 Fed. Cl. 240 1257 (Fed. Cl. 2000); *Miles*

Laboratories, Inc. v. Shandon, Inc., 997 F.2d 870 (Fed. Cir. 1993); *North American Vaccine, Inc., v. American Cyanamid Co.*, 7 F.3d 1571 (Fed. Cir. 1993); *U.S. v. Teletronics Inc.*, 857 F.2d 778, (Fed. Cir. 1988); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367 (Fed. Cir. 1986). Applicants stress that claims must be interpreted as one having ordinary skill in the art would have interpreted the claims in light of and consistent with the supporting specification. *Zoltek Corp. v. United States, supra*; *Miles Laboratories, Inc. v. Shandon, Inc., supra*.

In applying the above legal tenets to the exigencies of the present case Applicants submit that the imposed rejection lacks merit. Initially, the Examiner did not even explain why the recitation “WC-based” would have confused one having ordinary skill in the art, as required by due process of law. *In re Frilette*, 423 F.2d 1397 (C.C.P.A. 1970); *In re Borkowski*, 422 F.2d 904 (C.C.P.A. 1970).

At any rate, in order to expedite prosecution, claim 9 has been clarified by reciting “tungsten carbide” in lieu of “WC”, consistent with what one having ordinary skill in the art would have understood , even from elementary chemistry. Clearly, one having ordinary skill in the art would have no difficulty understanding the scope of the claimed invention, particularly when reasonably interpreted in light of and consistent with the disclosure, which is the judicial standard. *Miles Laboratories, Inc. v. Shandon, Inc.*, 997 F.2d 870 (Fed. Cir. 1993). Applicants therefore submit that the imposed rejection of claim 9 under the second paragraph of 35 U.S.C. § 112 is not legally viable and, hence, solicit withdrawal thereof.

Claims 1 through 12 were rejected under 35 U.S.C. § 102 for lack of novelty as evidenced by Hitachi Tool.

In the statement of the rejection the Examiner merely stated that “Hitachi Tool discloses the claimed substrate having the claimed inner layer with the outer layer including the claimed amount of chlorine” without pointing out wherein each feature of the claimed invention is disclosed. This rejection is traversed.

The factual determination of lack of novelty under 35 U.S.C. § 102 requires the identical disclosure in a single reference of each element of a claimed invention, as those elements are set forth in the claims, such that the claimed invention is placed into the recognized possession of one having ordinary skill in the art. *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1308, (Fed. Cir. 2008); *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358 (Fed. Cir. 2003); *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367 (Fed. Cir. 2002); *Candt Tech Ltd. v. Resco Metal & Plastics Corp.*, 264 F.3d 1344 (Fed. Cir. 2001). Further, as a matter of procedural due process of law, the Examiner is required to specifically identify where an applied reference discloses each and every feature of a claimed invention, particularly when such is not apparent as in the present case. *In re Rijckaert*, 9 F.3d 1531 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452 (Fed. Cir. 1984). That initial burden has not been discharged. Moreover, there are fundamental differences between the claimed cutting tool and the cutting tool disclosed by Hitachi Tool that scotch the factual determination that Hitachi Tool discloses, or even remotely suggests, a cutting tool identically corresponding to that claimed.

Specifically and to begin with, it is not apparent, and the Examiner has not identified, where Hitachi Tool discloses or remotely suggests a cutting tool as claimed, comprising an AIN layer that contains chlorine. Quite the contrary, Hitachi Tool **teaches away** from the claimed invention by disclosing that increasing the chlorine content in a layer reduces the life of a tool

(paragraph [0024]). This clear teaching away from the claimed invention by Hitachi Tool constitutes powerful evidence of patentability.

Consistent with the above-argued **teaching away** from the claimed invention, Hitachi Tool certainly does not disclose or remotely suggest the use of hydrogen chloride (HCl) as a reaction gas, as in the claimed invention. This limitation, albeit processing in nature, cannot be ignored because it necessarily impacts the final product by introducing chlorine, thereby further distinguishing the claimed cutting tool over Hitachi Tool. *In re Garnero*, 412 F.2d 276 (C.C.P.A. 1969).

There are additional distinguishing and functionally significant features of the claimed invention that have not been addressed by the Examiner. For example, the AlN or AlCN layer of the claimed cutting tool does not include Ti or WC. Consequently, the AlN or AlCN layer of the claimed cutting tool exhibits a lower hardness than a layer with Ti or WC. Accordingly, the AlN or AlCN layer of the claimed cutting tool improves lubricity as a result of having a low hardness and including chlorine.

Moreover, and in further support of the argument that the claim limitation requiring the use of hydrogen chloride (HCl) as a reaction gas must be given consideration, one having ordinary skill in the art would have recognized that chlorine cannot be included an AlN an AlCN layer containing Ti or WC without using HCl as a reaction gas. Further evidence appears at Table 1 of the written description of the specification, AlN*2, and in Table 2, Nos. 1-4. Such evidence cannot be ignored. *In re Soni*, 54 F.3d 746 (Fed. Cir. 1995); *In re Margolis*, 785 F.2d 1029 (Fed. Cir. 1986).

The above argued functionally significant differences between the claimed cutting tool and the cutting tool disclosed by Hitachi Tool undermine the factual determination that Hitachi

Tool discloses a cutting tool identically corresponding to that claimed. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). Applicants, therefore, submit that the imposed rejection of claims 1 through 12 under 35 U.S.C. § 102 for lack of novelty as evidenced by Hitachi Tool is not factually viable and, hence, solicit withdrawal thereof.

Based upon the foregoing, it is apparent that the imposed rejections have been overcome, and that all pending claims are in condition for immediate allowance. Favorable consideration therefore is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 703-519-9954 so that such issues may be resolved as expeditiously as possible.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 504213 and please credit any excess fees to such deposit account.

Respectfully Submitted,

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